

IN THE CLAIMS:

Please amend independent claims 1, 37, and 73. Pending claims 1-4, 6, 7, and 11-88 follow.

1. (Currently Amended) In a ~~de-centralized data processing~~ system having at least one client computer and a plurality of server computers, with at least one client computer and the plurality of server computers being connected through a communications network, the de-centralized data processing system being executable between the client computer and the plurality of server computers, a method of simultaneously processing data in one or more databases, comprising:

(a). providing a data processing system, the data processing system being embodied in the client computer and the plurality of server computers;

(b). receiving one or more source tables, wherein the source tables describe one or more entities in the database;

(c). generating one or more mapping tables, wherein the mapping tables describe the content and relationships of the source tables;

(d). generating one or more inverted tables from the content and relationships of the source tables, wherein the inverted tables are based on the generated mapping tables;

(e). mapping fields of the source tables to a predefined related set of fields;

(f). receiving a query from the client computer for one or more entities from one or more databases of the plurality of server computers, wherein the query is based on one or more fields of the predefined related set of fields;

(g). identifying the database fields that map to the fields of the predefined related set of fields searched;

(h). identifying one or more entities satisfying the query; and

(i). retrieving the one or more entities from each database,

wherein at least one of the steps (b)-(i) are executable between the client and the plurality of server and through the communications network using the data processing system above steps ~~is executed in a server computer and at least one of the above steps is executed in the client computer.~~

2. (Original) The method of claim 1, wherein the predefined related set of fields comprises an international standard.

3. (Original) The method of claim 1, wherein the predefined related set of fields comprises a specialized standard.

4. (Original) The method of claim 1, further comprising incrementally updating the inverted tables based on new source table data.

5. (Canceled).

6. (Previously Amended). The method of claim 1, wherein the database entity comprises an object.

7. (Previously Amended) The method of claim 1, wherein the database entity comprises a table.

8. (Canceled).

9. (Canceled).

10. (Canceled).

11. (Previously Amended) The method of claim 1, further comprising formatting the retrieved entity data.

12. (Previously Amended) The method of claim 11, further comprising displaying the retrieved entity data in the database field structure.

13. (Previously Amended) The method of claim 11, further comprising displaying the retrieved entity data in a structure of the predefined related set of fields.

14. (Original) The method of claim 1, wherein the source tables describe a single database.

15. (Original) The method of claim 1, wherein the source tables describe multiple databases.

16. (Original) The method of claim 15, wherein the source tables describe heterogeneous databases.

17. (Original). The method of claim 15, further comprising receiving a query requesting one or more entities from a plurality of databases, wherein the query is based on one or more fields of the predefined related set of fields.

18. (Original) The method of claim 17, further comprising identifying fields of the plurality of databases that map to the fields of the predefined related set of fields searched.

19. (Previously Amended) The method of claim 18, further comprising identifying one or more entities satisfying the query of the plurality of databases.

20. (Previously Amended) The method of claim 19, further comprising retrieving the entity data from one or more databases of the plurality of databases.

21. (Original) The method of claim 17, wherein the query is based on a plurality of fields of the predefined related set of fields.

22. (Original) The method of claim 21, further comprising identifying fields of the plurality of databases that map to the plurality of fields of the predefined related set of fields searched.

23. (Previously Amended) The method of claim 22, further comprising identifying one or more entities satisfying the query of the plurality of databases.

24. (Previously Amended) The method of claim 23, further comprising retrieving the entity data from one or more databases of the plurality of databases.

25. (Original) The method of claim 1, wherein the source tables describe distributed databases.

26. (Original) The method of claim 1, wherein the source tables are represented by a combination of the mapping tables and the inverted tables.

27. (Original) The method of claim 1, wherein object data is simultaneously retrieved from different databases.

28. (Original) The method of claim 1, wherein the source tables comprise a relational database.
29. (Original) The method of claim 1, wherein the source table platform is XML.
30. (Original) The method of claim 1, wherein the source table platform is SGML.
31. (Original) The method of claim 1, wherein the inverted table comprises a terms look up table, and wherein the terms look up table is used to identify objects in the database.
32. (Previously Amended) The method of claim 31, wherein the terms lookup table associates individual terms with entities.
33. (Original) The method of claim 1, wherein the inverted table comprises a value lookup table.
34. (Original) The method of claim 33, wherein a value in the value lookup table comprises one or more terms.
35. (Previously Amended) The method of claim 33, wherein the value lookup table associates values with entities.
36. (Original) The method of claim 33, wherein values of different data types are stored in separate fields of the value lookup table.

37. (Currently Amended) A ~~de-centralized~~ system for processing data in one or more databases of a client-server database system connected through a communications network comprising:

one or more computers having a data store coupled thereto, wherein the data store stores data; and

a data processing system, the data processing system being embodied in a client computer and a plurality of server computers, the data processing system comprising one or more computer programs of the de-centralized system, the one or more computer programs being that are executable between the a client computer and the a server computers and through the communications network for processing data in one or more databases, wherein the one or more computers are programmed to receive

one or more source tables, wherein the one or more source tables describe one or more entities in the one or more databases; generate one or more mapping tables, wherein the one or more mapping tables describe the content and relationships of the one or more source tables; generate one or more inverted tables from the content and relationships of the one or more source tables, wherein the one or more inverted tables are based on the one or more generated mapping tables; and map one or more fields of the one or more source tables to a predefined related set of fields.

38. (Original) The system of claim 37, wherein the predefined related set of fields comprises an international standard.

39. (Original) The system of claim 37, wherein the predefined related set of fields comprises a specialized standard.

40. (Original) The system of claim 37, wherein the one or more computers are programmed further to incrementally update the one or more inverted tables based on new source table data.

41. (Original) The system of claim 37, wherein the one or more computers are programmed further to receive a query requesting an entity from one or more of the databases, wherein the query requests data with one or more fields of the predefined related set of fields.

42. (Original) The system of claim 41, wherein the database entity comprises an object.

43. (Original) The system of claim 41, wherein the database entity comprises a table.

44. (Original) The system of claim 41, wherein the one or more computers are programmed further to identify the database fields that map to the one or more fields of the predefined related set of fields searched.

45. (Previously Amended) The system of claim 44, wherein the one or more computers are programmed further to identify one or more entities satisfying the query.

46. (Previously Amended) The system of claim 45, wherein the one or more computers are programmed further to retrieve the entity data from each database.

47. (Previously Amended) The system of claim 46, wherein the one or more computers are programmed further to format the retrieved entity data.

48. (Previously Amended) The system of claim 47, wherein the one or more computers are programmed further to display the retrieved entity data in the database field structure.

49. (Previously Amended) The system of claim 47, wherein the one or more computers are programmed further to display the retrieved entity data in a structure of the predefined related set of fields.

50. (Original) The system of claim 37, wherein the one or more source tables describe a single database.

51. (Original) The system of claim 37, wherein the one or more source tables describe multiple databases.

52. (Original) The system of claim 51, wherein the one or more source tables describe heterogeneous databases.

53. (Original) The system of claim 51, wherein the one or more computers are programmed further to receive a query requesting one or more entities from a plurality of databases, wherein the query is based on one or more fields of the predefined related set of fields.

54. (Original) The system of claim 53, wherein the one or more computers are programmed further to identify one or more fields of the plurality of databases that map to the one or more fields of the predefined related set of fields searched.

55. (Previously Amended) The system of claim 54, wherein the one or more computers are programmed further to identify one or more entities satisfying the query of the plurality of databases.

56. (Previously Amended) The system of claim 55, wherein the one or more computers are programmed further to retrieve the entity data from one or more databases of the plurality of databases.

57. (Original) The system of claim 53, wherein the query is based on a plurality of fields of the predefined related set of fields.

58. (Original) The system of claim 57, wherein the one or more computers are programmed further to identify fields of the plurality of databases that map to the plurality of fields of the predefined related set of fields searched.

59. (Previously Amended) The system of claim 58, wherein the one or more computers are programmed further to identify one or more entities satisfying the query of the plurality of databases.

60. (Previously Amended) The system of claim 59, wherein the one or more computers are programmed further to retrieve the entity data from one or more databases of the plurality of databases.

61. (Original) The system of claim 37, wherein the source tables describe distributed databases.

62. (Original) The system of claim 37, wherein the source tables are represented by a combination of the mapping tables and the inverted tables.

63. (Original) The system of claim 37, wherein object data is simultaneously retrieved from different databases.

64. (Original) The system of claim 37, wherein the source tables comprise a relational database.

65. (Original) The system of claim 37, wherein the source table platform is XML.

66. (Original) The system of claim 37, wherein the source table platform is SGML.

67. (Original) The system of claim 37, wherein the inverted table comprises a terms look up table, and wherein the terms look up table is used to identify objects in the database.

68. (Previously Amended) The system of claim 67, wherein the terms lookup table associates individual terms with entities.

69. (Original) The system of claim 37, wherein the inverted table comprises a value lookup table.

70. (Original) The system of claim 69 wherein a value in the value lookup table comprises one or more terms.

71. (Previously Amended) The system of claim 70, wherein the value lookup table associates values with entities.

72. (Original) The system of claim 71, wherein values of different data types are stored in separate fields of the value lookup table.

73. (Currently Amended) A ~~de-centralized~~ system for processing data in one or more databases of a client-server database system connected through a communications network, comprising:

one or more computers;

a data processing system, the data processing system being embodied in a client computer and a plurality of server computers, the data processing system comprising one or more computer programs of the de-centralized system, the one or more computer programs being that are executable between the a client computer and the a server computers and through the communications network for processing data in one or more databases,

one or more source tables stored on the one or more computers, wherein the one or more source tables describe one or more entities in the one or more databases;

one or more mapping tables stored on the one or more computers, wherein the one or more mapping tables describe the content and relationships of the one or more source tables;

one or more inverted tables stored on the one or more computers, wherein the one or more inverted tables are generated from the content and relationships of the one or more source tables, wherein the one or more inverted tables are based on the one or more generated mapping tables; and

a predefined related set of fields stored on the one or more computers, wherein one or more fields of the one or more source tables are mapped to one or more fields of the predefined related set of fields.

74. (Original) The system of claim 73, wherein the one or more computers are programmed further to receive a query requesting an entity from the one or more of the databases, wherein the query requests data with one or more fields of the predefined related set of fields.

75. (Original) The system of claim 74, wherein the one or more computers are programmed further to identify the database fields that map to fields of the predefined related set of fields searched.

76. (Previously Amended) The system of claim 75, wherein the one or more computers are programmed further to identify one or more entities satisfying the query.

77. (Previously Amended) The system of claim 76, wherein the one or more computers are programmed further to retrieve the entity data from each database.

78. (Previously Amended) The system of claim 77, wherein the one or more computers are programmed further to format the retrieved entity data.

79. (Previously Amended) The system of claim 78, wherein the one or more computers are programmed further to display the retrieved entity data in the database field structure.

80. (Previously Amended) The system of claim 78, wherein the one or more computers are programmed further to display the retrieved entity data in a structure of the predefined related set of fields.

81. (Original) The system of claim 73, wherein the one or more computers are programmed further to receive a query requesting one or more entities from a plurality of databases, wherein the query is based on one or more fields of the predefined related set of fields.

82. (Original) The system of claim 81, wherein the one or more computers are programmed further to identify fields of the plurality of databases that map to the fields of the predefined related set of fields searched.

83. (Previously Amended) The system of claim 82, wherein the one or more computers are programmed further to identify one or more entity satisfying the query of the plurality of databases.

84. (Previously Amended) The system of claim 83, wherein the one or more computers are programmed further to retrieve the entity data from one or more databases of the plurality of databases.

85. (Original) The system of claim 81, wherein the query is based on a plurality of fields of the predefined related set of fields.

86. (Previously Amended) The system of claim 85, wherein the one or more computers are programmed further to identify fields of the plurality of databases that map to the plurality of fields of the predefined related set of fields searched.

87. (Previously Amended) The system of claim 86, wherein the one or more computers are programmed further to identify one or more entities satisfying the query of the plurality of databases.

88. (Previously Amended) The system of claim 87, wherein the one or more computers are programmed further to retrieve the entity data from one or more databases of the plurality of databases.